

AD-A204 561

DTIC FILE COPY

DATE 2-8-89

TO: Information Services Branch

FROM: Computer Products Support Group *DS*
(Init)

(Init)

L. G.
(Init)

RE: DOD/SW/DK-89/004 . Announce in GRA&I
(Report No.)

Priority Action is Required

Attached

- ☒ Form NTIS 231.
- ☒ Form NTIS FCPC 01 (Form 277)
- ☒ NTIS 79
- ☒ RDP (OF 272)
- ☐ Proof Listing
- ☐ Consigned Inventory Acquisition Form (Interagency Agreement Number and Split)

Process for:

K File
(Data)

☐ Documentation

☐ Diskette

H File
(Software)

☒ Documentation

☒ Diskette

Action

- ☐ Loan Document Form Attached
- ☒ Defense Sponsored: Acquire ADA Number
- ☐ Order Pending. Return immediately after copying necessary pages.

Remarks

Documentation from DOD/SW/DK-89/003 needs to be included with this package.

Highlight

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

Computer Products Transmittal

89 2 24 035

DTIC
ELECTE
FEB 27 1989
S *QD* D

☐ DELETE☒ NEW☐ REPLACE☐ CORRECTIONNTIS COMPUTER PRODUCTS
CATALOG DATA SHEET

1. ACCESSION NO.

2. CONTRIBUTING AGENCY REPORT NO.

3. SUBJECT

DOD/SW/DK-89/004

4. PRODUCT (circle one)

DATA FILE

PUBLICATION

DATA BASE REFERENCE SERVICE

SOFTWARE

MODEL, SIMULATION

5. AGENCY, BUREAU, DIVISION, AND ADDRESS

Department of Army
The Hydrologic Engineering Center, Corps of Engineers
609 Second Street
Davis, California 95616

6. PRODUCT NAME (Use agency nomenclature)

HEC-1, Flood Hydrograph Package (for Microcomputers)

7. DESCRIPTORS OF PRODUCT (Keywords, identifiers, etc.)

*Software, Diskette
Surface Water Hydrology, Flood Hydrograph, Surface Runoff Response,
Rainfall-Snowfall-Snowmelt Determination,
Computer Program

8. DATES OF COVERAGE (For one-time reports, use as-of-date; for software,
use date and release no.)

Version Jun 88

9. FILE SIZE IN NO. OF:

Diskettes ☐ 3 PUNCHED CARDS ☐

10. AVAILABILITY STATEMENT - AGENCY NAME AND ADDRESS, ORDER NO., ETC. (If NTIS sells, leave blank)

11. PRICE INFORMATION

125.00
~~960.00~~ (domestic) Price includes documentation:
Price code: ~~003~~ D03 \$120.00 (foreign)

12. GEOGRAPHIC SCOPE

None

13. TECHNICAL REPRESENTATIVES (List at least one for subject and one for media)

NAME

TITLE

PHONE NO.

Gary Brunner

(916) 551-1748

David Goldman

(916) 551-1748

Arlen Feldman

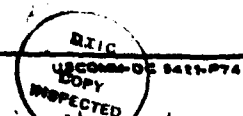
(916) 551-1748

14. DOCUMENTATION

EXPECTED AVAILABILITY DATE

☒ AVAILABLE AS:

NA



A-1121

15. COMPUTER PRODUCT ABSTRACT

HEC-1 is a mathematical watershed model designed to simulate the surface runoff response of a river basin to precipitation by representing the basin as an interconnected system of hydrologic and hydraulic components. Each component models an aspect of the precipitation-runoff process within a portion of the basin. A component may represent a surface runoff entity, a stream channel or a reservoir, defined by parameters specifying its characteristics and the mathematical relations describing the physical processes. The result of the modeling process is computation of streamflow hydrographs at desired locations in the river basin. All ordinary flood hydrograph computations associated with a single recorded or hypothetical storm can be accomplished with this package. Capabilities include rainfall-snowfall-snowmelt determinations, computations of basin precipitation, unit hydrographs, kinematic wave transforms, and hydrograph routing by reservoir, storage-lag, multiple storage, straddle-stagger, Tatum, Muskingum, and kinematic wave methods; and complete stream system hydrograph combining and routing. Best-fit unit hydrograph, loss-rate, snowmelt, base freezing temperatures and routing coefficients can be derived automatically. Automatic printer plot routines are also provided. HEC-1 may also be used to simulate flow over and through breached dams. Expected annual flood damage can be also be computed for any location in the river basin. ...Software Description: The program is written in FORTRAN 77 for implementation on IBM PC/XT compatible equipment, using MS/PC DOS 2.1+ operating system. Minimum of 640 K bytes core. Two 5 $\frac{1}{4}$ " floppy disk drives, or one 5 $\frac{1}{4}$ " floppy disk drive and a 10 MB hard disk Math coprocessor (8087, 80287, 80387) highly recommended but not required. Hard disk is required to run MENU1. (JES) ←

16. DATA FILE TECHNICAL DESCRIPTION

The software is contained on 5 $\frac{1}{4}$ -inch diskette(s), double density (360K), compatible with the IBM PC/XT microcomputer. The diskettes are in the ASCII format.

17. SOFTWARE TECHNICAL DESCRIPTION

Software is written in;

Fortran X COBOL _____ Basic _____ Assembly _____ Other (Specify) FORTRAN 77

Software requires;

CPR Mfr. IBM PC Model(s) XT Operating system(s) MS/PC DOS 2.1+
Minimum of 640 K bytes core. The following special features and/or additional requirements in hardware:
Two 5 $\frac{1}{4}$ " Floppy disk drives, or one 5 $\frac{1}{4}$ " floppy disk drive and a 10 MB hard disk.
Math coprocessor (8087, 80287, 80387) highly recommended but not required. Hard disk is required to run MENU1.

SIGNATURE OF AGENCY REPRESENTATIVE, PHONE NO., AND DATE

SIGNATURE OF NTIS REPRESENTATIVE AND DATE FORM PREPARED

COMPUTER MAGNETIC TAPE FILE PROPERTIES

01. Completion Date Year Month Day 			02. Form Prepared By (Name and Phone) Vernon R. Bonner			03. Reel ID Number (Property Control No.)		
04. Recording Date Year Month Day 			05. File Identifier or Descriptive Title HEC-1, Flood Hydrograph Package			06. Short Title (External Label Name) HEC-1		
07. Source Unavailable Year Month Day 			08. Documentation Yes No Available <input checked="" type="checkbox"/> (Enter Citation)			09. File Position on Reel _____ of _____		
10. To Be Returned Yes No To Other <input checked="" type="checkbox"/> Than The Sender			11. Submitting Organization & Address Department of Army The Hydrologic Engineering Center Corps of Engineers 609 Second Street Davis, California 95616			12. Receiving Organization & Address United States Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, Virginia 22161		
13. Due Back Date Year Month Day 								

14. Technical Contact(s) & Phone Number(s)

Gary Brunner, David Goldman, Arlen Feldman (916) 551-1748

RECORDING SYSTEM CHARACTERISTICS

EQUIPMENT MANUFACTURER AND MODEL	15. Processing Unit IBM PC or compatibles		17. No. of Tracks			18. Parity		19. Density (BPI)
	16. Tape Subsystem		7	9	Other	Odd	Even	
RECORDING SOFTWARE	20. Operating System, Release & Version MS DOS 2.1 or greater		22. Internal File Identifier					
	21. Utility Program PKXARC.COM (included) used to de- or Data Base Language archive files with .ARC extens							
23. Characters Set (Graphics) <input checked="" type="checkbox"/> ASCII <input type="checkbox"/> BCD <input type="checkbox"/> Other (Specify) <input type="checkbox"/> EBCDIC <input type="checkbox"/> FIELDATA <input type="checkbox"/> Non-Print Codes			24. Recorded Label (Internal Label) <input type="checkbox"/> Header <input type="checkbox"/> ANSI X 3.27 Standard <input type="checkbox"/> Other <input type="checkbox"/> Trailer <input type="checkbox"/> FIPS Standard <input checked="" type="checkbox"/> None					

FILE CHARACTERISTICS

NUMBER OF RECORDS	25. Physical	27. Record Type <input checked="" type="checkbox"/> Fixed Length <input type="checkbox"/> Other Than Fixed		28. Records/Block (Blocking Factor) 1	29. TYPE OF FILE ORGANIZ- ATION (Check One Box) <input type="checkbox"/> One File One Reel <input type="checkbox"/> One File Multiple Reels <input type="checkbox"/> Multiple Files One Diskette <input checked="" type="checkbox"/> Multiple Files Multiple Diskettes
	26. Logical				
RECORD LENGTH	30. Physical 80 <input checked="" type="checkbox"/> Bytes <input type="checkbox"/> Chars. <input type="checkbox"/> Words (Bits/Word)				
	31. Logical <input type="checkbox"/> Bytes <input type="checkbox"/> Chars. <input type="checkbox"/> Words (Bits/Word)				

SUPPLEMENTAL INFORMATION

32. Use/Handling Constraints (Specify if Yes)

Yes	No
	<input checked="" type="checkbox"/>

33. For Submitting Organization Use

HEC-1 is provided on three 5 $\frac{1}{4}$ " double-sided 360 KB floppy diskettes, as follows:

- (1) INSTALL1 - installation program;
- (2) COED - Corps of Engineers full-screen editor;
- (3) HEC1 - program files, implementation guide (file README.DOC).